

DUAL COMPOSITION CERAMIC SUBSTRATE FOR MICROELECTRONIC APPLICATIONS

ABSTRACT

Ceramic substrates (1) for microelectronic modules are formed in multiple layers (7 & 9) fused into a unitary one-piece assembly. The layers contain the same ceramic material but in different purity so that one outer layer (9) is optimal in composition for bonding to a thick film conductor (11) and the other outer layer (7) is optimal in composition for bonding to a thin film conductor (13). In a dual composition substrate embodiment one layer is formed of a 96% alumina composition and the second layer is formed of a 99.6% alumina composition.